Title (en)

Glow discharge apparatus and method with lateral rotating arc cathodes

Title (de)

Glimmentladungsvorrichtung und Verfahren mit seitlich rotierenden Lichtbogenkathoden

Title (fr)

Appareil décharge luminescente et procédé de cathodes à arc à rotation latérale

Publication

EP 2521159 A1 20121107 (EN)

Application

EP 11165152 A 20110506

Priority

EP 11165152 A 20110506

Abstract (en)

To improve the result of a glow discharge process is disclosed to be performed in a Physical Vapor Deposition (PVD) coating apparatus comprising a door, at least 2 lateral rotating cathodes with targets. The apparatus is equipped by rotating shields or tube shutters (4). The method comprises the steps of operating the apparatus so that the arc of said second electrode (2) burns directly to said door. The rotary shield or tube shutter on a first electrode (1) is open and said rotary shield or tube shutter (4) on a second electrode (2) is closed. Then a positive potential is applied on said first electrode (1), so that a potential between said second electrode (2) and said first electrode (1) is applied. The positive potential applied on said first electrode (1) is selected so that the electron stream does not burn only against the door since the electrons being affected by the higher potential to said first electrode (1).

IPC 8 full level

H01J 37/34 (2006.01); **H01J 37/32** (2006.01)

CPC (source: EP US)

C23C 14/0641 (2013.01 - EP US); **C23C 14/325** (2013.01 - EP US); **C23C 14/34** (2013.01 - US); **C23C 14/3464** (2013.01 - US); **H01J 37/32055** (2013.01 - EP US); **H01J 37/34** (2013.01 - EP US); **H01J 37/3405** (2013.01 - EP US); **H01J 37/3411** (2013.01 - US); **H01J 37/3438** (2013.01 - EP US); **H01J 37/3441** (2013.01 - EP US)

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Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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DOCDB simple family (application)

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